

Docket No.: M4065.0988/P988-A  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

---

In re Patent Application of:  
Kristy A. Campbell

Application No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Filed: Not Yet Assigned

Examiner: Not Yet Assigned

For: METHOD AND APPARATUS FOR  
RESISTANCE VARIABLE MATERIAL CELLS

---

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the subject matter of the documents be expressly considered during the prosecution of this application and that the documents be made of record therein and appear among the "References Cited" on any patent to issue from this application. This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned. Copies of the references are not provided since they were provided in the parent case.

A brief explanation of relevance of the non-(U.S.)-patent documents listed on form PTO/SB/08 is provided and attached hereto as Appendix A. The brief explanation provided for each document is not tantamount to an admission that a document is "material" or that it qualifies as prior art. The Examiner is respectfully requested to

utilize Appendix A only as a tool by which to better categorize the documents for substantive use in examining the claims of the application.

Documents discussed in Appendix A marked with an asterisk (\*) are indicated to be potentially more relevant than others. Such marking is provided only to assist the Examiner; however, the Examiner is requested to thoroughly review all documents cited herein.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider and cite the listed documents.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1073, under Order No. **M4065.0988/P988-A**. A duplicate copy of this paper is enclosed.

Dated: January 22, 2004

Respectfully submitted,

By 

Thomas J. D'Amico

Registration No.: 28,371

DICKSTEIN SHAPIRO MORIN &  
OSHINSKY LLP

2101 L Street, N.W.

Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicant

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Kn wn</b>	
				Application Number	N/A
				Filing Date	January 22, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	
				Examiner Name	
Sheet	1	of	11	Attorney Docket Number	M4065.0988/P988-A

+

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	2002/0000666	1/3/2002	Kozicki et al.	
	AB	2002/0072188	6/13/2002	Gilton	
	AC	2002/0106849	08/08/2002	Moore	
	AH	2002/0123169	09/05/2002	Moore et al.	
	AI	2002/0123170	09/05/2002	Moore et al.	
	AJ	2002/0123248	09/05/2002	Moore et al.	
	AK	2002/0127886	09/12/2002	Moore et al.	
	AL	2002/0132417	09/09/2002	Li	
	AF	2002/0160551	10/31/2002	Harshfield	
	AG	2002/0163828	11/07/2002	Krieger et al.	
	AM	2002/0168820	11/2002	Kozicki	
	AN	2002/0168852	11/14/2002	Harshfield et al.	
	AO	2002/0190289	12/19/2002	Harshfield et al.	
	AP	2002/0190350	12/19/2002	Kozicki et al.	
	AQ	2003/0001229	01/02/2003	Moore et al.	
	AR	2003/0027416	02/06/2003	Moore	
	AS	2003/0032254	02/13/2003	Gilton	
	AT	2003/0035314	02/20/2003	Kozicki	
	AU	2003/0035315	02/20/2003	Kozicki	
	AV	2003/0038301	02/27/2003	Moore	
	AW	2003/0043631	03/06/2003	Gilton et al.	
	AX	2003/0045049	03/06/2003	Campbell et al.	
	AY	2003/0045054	03/06/2003	Campbell et al.	
	AZ	2003/0047765	03/13/2003	Campbell	
	AA1	2003/0047772	03/13/2003	Li	
	AB1	2003/0047773	03/13/2003	Li	
	AC1	2003/0048519	03/13/2003	Kozicki	
	AD1	2003/0049912	03/13/2003	Campbell et al.	
	AE1	2003/0068861	04/10/2003	Li	
	AF1	2003/0068862	04/10/2003	Li	
	AG1	2003/0095426	05/22/2003	Hush et al.	
	AH1	2003/0096497	05/22/2003	Moore et al.	
	AI1	2003/0107105	06/12/2003	Kozicki	
	AJ1	2003/0117831	06/26/2003	Hush	
	AK1	2003/0128612	07/10/2003	Moore et al.	
	AL1	2003/0137869	07/24/2003	Kozicki	
	AM1	2003/0143782	07/31/2003	Gilton et al.	
	AN1	2003/0155589	08/21/2003	Campbell et al.	
	AO1	2003/0155606	08/21/2003	Campbell et al.	
	AP1	2003/0156447	08/21/2003	Kozicki	
	AQ1	2003/0156463	08/21/2003	Casper et al.	
	AR1	2003/0209728	11/13/2003	Kozicki et al	
	AS1	2003/0209971	11/13/2003	Kozicki et al	
	AT1	2003/0210564	11/13/2003	Kozicki et al	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>C mplete if Kn wn</b>	
				Application Number	N/A
				Filing Date	January 22, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	
				Examiner Name	
Sheet	2	of	11	Attorney Docket Number	M4065.0988/P988-A

	AU1	3,622,319	11/1971	Sharp	
	AV1	3,743,847	7/1973	Boland	
	AW1	4,269,935	5/1981	Masters et al.	
	AX1	4,312,938	1/1982	Drexler, et al.	
	AY1	4,316,946	1/1982	Masters, et al.	
	AZ1	4,320,191	3/1982	Yoshikawa et al.	
	AA2	4,405,710	9/1983	Balasubramanyam et al.	
	AB2	4,419,421	12/1983	Wichelhaus, et al.	
	AC2	4,499,557	2/1985	Holmberg et al.	
	AD2	4,671,618	06/09/1987	Wu et al.	
	AE2	4,795,657	1/1989	Formigoni et al.	
	AF2	4,800,526	01/24/1989	Lewis	
	AG2	4,847,674	7/1989	Sliwa et al.	
	AH2	5,177,567	1/1993	Klersy et al.	
	AI2	5,219,788	6/1993	Abernathey et al.	
	AJ2	5,238,862	8/1993	Blalock et al.	
	AK2	5,272,359	12/21/1993	Nagasubramanian et al.	
	AL2	5,314,772	5/24/1994	Kozicki	
	AM2	5,315,131	5/1994	Kishimoto et al.	
	AN2	5,350,484	9/1994	Gardner et al.	
	AO2	5,360,981	11/1994	Owen et al.	
	AP2	5,418,640	5/1995	Hood	
	AQ2	5,500,532	3/19/1996	Kozicki et al.	
	AR2	5,512,328	4/1996	Yoshimura et al.	
	AS2	5,512,773	4/1996	Wolf et al.	-
	AT2	5,726,083	3/1998	Takaishi	
	AU2	5,751,012	5/12/1998	Wolstenholme et al.	
	AV2	5,761,115	6/1998	Kozicki et al.	
	AW2	5,789,277	8/1998	Zahorik et al.	
	AX2	5,814,527	9/29/1998	Wolstenholme et al	
	AY2	5,818,749	10/06/1998	Harshfield	
	AZ2	5,841,150	11/1998	Gonzalez et al.	
	AA3	5,846,889	12/1998	Harbison et al.	
	AB3	5,851,882	12/22/1998	Harshfield	
	AC3	5,869,843	2/9/1999	Harshfield	
	AD3	5,896,312	4/20/1999	Kozicki et al.	
	AE3	5,914,893	6/22/1999	Kozicki et al.	
	AF3	5,920,788	7/1999	Reinberg	
	AG3	5,998,066	12/1999	Block et al.	
	AH3	6,031,287	2/29/2000	Harshfield	
	AI3	6,072,716	06/06/2000	Jacobson et al.	
	AJ3	6,077,729	6/2000	Harshfield	
	AK3	6,084,796	7/4/2000	Kozicki et al.	
	AL3	6,177,338	1/2001	Liaw et al.	
	AM3	6,117,720	9/2000	Harshfield	
	AN3	6,143,604	11/2000	Chiang et al.	
	AO3	6,236,059	5/2001	Wolsteinholme et al.	
	AP3	6,297,170	10/2001	Gabriel et al.	
	AQ3	6,300,684	10/2001	Gonzalez et al.	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>C mplete if Known</b>	
				Application Number	N/A
				Filing Date	January 22, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	
				Examiner Name	
Sheet	3	of	11	Attorney Docket Number	M4065.0988/P988-A

	AR3	6,316,784	11/2001	Zahorik et al.	
	AS3	6,329,606	12/2001	Freyman et al.	
	AT3	6,348,365	2/19/2002	Moore et al.	
	AU3	6,350,679	2/2002	McDaniel et al.	
	AV3	6,376,284	4/2002	Gonzalez et al.	
	AW3	6,388,324	5/14/2002	Kozicki et al.	
	AX3	6,391,688	5/2002	Gonzalez et al.	
	AY3	6,414,376	7/2002	Thakur et al.	
	AZ3	6,418,049	7/9/2002	Kozicki et al.	
	AA4	6,420,725	7/16/2002	Harshfield	
	AB4	6,423,628	7/2002	Li et al.	
	AC4	6,440,837	8/27/2002	Harshfield	
	AD4	6,469,364	10/2002	Kozicki	
	AE4	6,473,332	10/2002	Ignatiev et al.	
	AF4	6,487,106	11/26/2002	Kozicki	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>2</sup> -Number <sup>3</sup> -Kind Code <sup>4</sup> (if known)				
	BA	56126916	10/19981	Akira et al.		
	BB	WO 97/48032	12/18/1997	Kozicki et al.		
	BC	WO 99/28914	06/10/1999	Kozicki et al.		
	BD	WO 00/48196	08/17/2000	Kozicki et al.		
	BE	WO 02/21542	03/14/2002	Kozicki et al.		
	BD	1,187,965	5/1967	Birdseye, et al.		
	BE	2-122501	5/1990			
	BF	59-20913	2/1984			
	BG	50-18597	9/1973			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See attached Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	N/A	
			Filing Date	January 22, 2004	
			First Named Inventor	Kristy A. Campbell	
			Art Unit		
			Examiner Name		
Sheet	4	of	11	Attorney Docket Number	M4065.0988/P988-A

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Abdel-All, A.; Elshafie, A.; Elhawary, M.M., DC electric-field effect in bulk and thin-film Ge <sub>5</sub> As <sub>38</sub> Te <sub>57</sub> chalcogenide glass, Vacuum 59 (2000) 845-853.	
	CB	Adler, D.; Moss, S.C., Amorphous memories and bistable switches, J. Vac. Sci. Technol. 9 (1972) 1182-1189.	
	CC	Adler, D.; Henisch, H.K.; Mott, S.N., The mechanism of threshold switching in amorphous alloys, Rev. Mod. Phys. 50 (1978) 209-220.	
	CD	Afifi, M.A.; Labib, H.H.; El-Fazary, M.H.; Fadel, M., Electrical and thermal properties of chalcogenide glass system Se <sub>75</sub> Ge <sub>25</sub> -xSbx, Appl. Phys. A 55 (1992) 167-169.	
	CE	Afifi, M.A.; Labib, H.H.; Fouad, S.S.; El-Shazly, A.A., Electrical & thermal conductivity of the amorphous semiconductor GexSe <sub>1-x</sub> , Egypt, J. Phys. 17 (1986) 335-342.	
	CF	Alekperova, Sh.M.; Gadzhieva, G.S., Current-Voltage characteristics of Ag <sub>2</sub> Se single crystal near the phase transition, Inorganic Materials 23 (1987) 137-139.	
	CG	Aleksiejunas, A.; Cesnys, A., Switching phenomenon and memory effect in thin-film heterojunction of polycrystalline selenium-silver selenide, Phys. Stat. Sol. (a) 19 (1973) K169-K171.	
	CH	Angell, C.A., Mobile ions in amorphous solids, Annu. Rev. Phys. Chem. 43 (1992) 693-717.	
	CI	Aniya, M., Average electronegativity, medium-range-order, and ionic conductivity in superionic glasses, Solid state Ionics 136-137 (2000) 1085-1089.	
	CJ	Asahara, Y.; Izumitani, T., Voltage controlled switching in Cu-As-Se compositions, J. Non-Cryst. Solids 11 (1972) 97-104.	
	CK	Asokan, S.; Prasad, M.V.N.; Parthasarathy, G.; Gopal, E.S.R., Mechanical and chemical thresholds in IV-VI chalcogenide glasses, Phys. Rev. Lett. 62 (1989) 808-810	
	CL	Axon Technologies Corporation, TECHNOLOGY DESCRIPTION: <i>Programmable Metalization Cell(PMC)</i> , pp. 1-6 (Pre-May 2000).	
	CM	Baranovskii, S.D.; Cordes, H., On the conduction mechanism in ionic glasses, J. Chem. Phys. 111 (1999) 7546-7557.	
	CN	Belin, R.; Taillades, G.; Pradel, A.; Ribes, M., Ion dynamics in superionic chalcogenide glasses: complete conductivity spectra, Solid state Ionics 136-137 (2000) 1025-1029.	
	CO	Belin, R.; Zerouale, A.; Pradel, A.; Ribes, M., Ion dynamics in the argyrodite compound Ag <sub>7</sub> GeSe <sub>5</sub> I: non-Arrhenius behavior and complete conductivity spectra, Solid State Ionics 143 (2001) 445-455.	
	CP	Benmore, C.J.; Salmon, P.S., Structure of fast ion conducting and semiconducting glassy chalcogenide alloys, Phys. Rev. Lett. 73 (1994) 264-267.	
	CQ	Bernede, J.C., Influence du metal des electrodes sur les caracteristiques courant-tension des structures M-Ag <sub>2</sub> Se-M, Thin solid films 70 (1980) L1-L4.	
	CR	Bernede, J.C., Polarized memory switching in MIS thin films, Thin Solid Films 81 (1981) 155-160.	
	CS	Bernede, J.C., Switching and silver movements in Ag <sub>2</sub> Se thin films, Phys. Stat. Sol. (a) 57 (1980) K101-K104.	
	CT	Bernede, J.C., Commutations dans les couches minces de selenium, Phys. Stat. Vol. (a), 97-102 (1981).	
	CU	Bernede, J.C.; Abachi, T., Differential negative resistance in metal/insulator/metal structures with an upper bilayer electrode, Thin solid films 131 (1985) L61-L64.	
	CV	Bernede, J.C.; Conan, A.; Fousenan't, E.; El Bouchairi, B.; Goureaux, G., Polarized memory switching effects in Ag <sub>2</sub> Se/Se/M thin film sandwiches, Thin solid films 97 (1982) 165-171.	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	N/A
				Filing Date	January 22, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	
				Examiner Name	
Sheet	5	of	11	Attorney Docket Number	M4065.0988/P988-A

	CW	Bernede, J.C.; Khelil, A.; Kettaf, M.; Conan, A., Transition from S- to N-type differential negative resistance in Al-Al <sub>2</sub> O <sub>3</sub> -Ag <sub>2</sub> -xSe <sub>1+x</sub> thin film structures, Phys. Stat. Sol. (a) 74 (1982) 217-224.	
	CX	Bondarev, V.N.; Pikhitsa, P.V., A dendrite model of current instability in RbAg <sub>4</sub> I <sub>5</sub> , Solid State Ionics 70/71 (1994) 72-76.	
	CY	Boolchand, P., The maximum in glass transition temperature (T <sub>g</sub> ) near x=1/3 in GexSe <sub>1-x</sub> Glasses, Asian Journal of Physics (2000) 9, 709-72.	
	CZ	Boolchand, P.; Bresser, W.J., Mobile silver ions and glass formation in solid electrolytes, Nature 410 (2001) 1070-1073.	
	CA1	Boolchand, P.; Georgiev, D.G.; Goodman, B., Discovery of the Intermediate Phase in Chalcogenide Glasses, J. Optoelectronics and Advanced Materials, 3 (2001), 703	
	CB1	Boolchand, P.; Selvanathan, D.; Wang, Y.; Georgiev, D.G.; Bresser, W.J., Onset of rigidity in steps in chalcogenide glasses, Properties and Applications of Amorphous Materials, M.F. Thorpe and Tichy, L. (eds.) Kluwer Academic Publishers, the Netherlands, 2001, pp. 97-132.	
	CC1	Boolchand, P.; Enzweiler, R.N.; Tenhover, M., Structural ordering of evaporated amorphous chalcogenide alloy films: role of thermal annealing, Diffusion and Defect Data Vol. 53-54 (1987) 415-420.	
	CD1	Boolchand, P.; Grothaus, J.; Bresser, W.J.; Suranyi, P., Structural origin of broken chemical order in a GeSe <sub>2</sub> glass, Phys. Rev. B 25 (1982) 2975-2978.	
	CE1	Boolchand, P.; Grothaus, J.; Phillips, J.C., Broken chemical order and phase separation in GexSe <sub>1-x</sub> glasses, Solid state comm. 45 (1983) 183-185.	
	CF1	Boolchand, P.; Bresser, W.J., Compositional trends in glass transition temperature (T <sub>g</sub> ), network connectivity and nanoscale chemical phase separation in chalcogenides, Dept. of ECECS, Univ. Cincinnati (October 28, 1999) 45221-0030.	
	CG1	Boolchand, P.; Grothaus, J., Molecular Structure of Melt-Quenched GeSe <sub>2</sub> and GeS <sub>2</sub> glasses compared, Proc. Int. Conf. Phys. Semicond. (Eds. Chadi and Harrison) 17 <sup>th</sup> (1985) 833-36.	
	CH1	Bresser, W.; Boolchand, P.; Suranyi, P., Rigidity percolation and molecular clustering in network glasses, Phys. Rev. Lett. 56 (1986) 2493-2496.	
	CI1	Bresser, W.J.; Boolchand, P.; Suranyi, P.; de Neufville, J.P, Intrinsically broken chalcogen chemical order in stoichiometric glasses, Journal de Physique 42 (1981) C4-193-C4-196.	
	CJ1	Bresser, W.J.; Boolchand, P.; Suranyi, P.; Hernandez, J.G., Molecular phase separation and cluster size in GeSe <sub>2</sub> glass, Hyperfine Interactions 27 (1986) 389-392.	
	CK1	Cahen, D.; Gilet, J.-M.; Schmitz, C.; Chernyak, L.; Gartsman, K.; Jakubowicz, A., Room-Temperature, electric field induced creation of stable devices in CuInSe <sub>2</sub> Crystals, Science 258 (1992) 271-274.	
	CL1	Chatterjee, R.; Asokan, S.; Titus, S.S.K., Current-controlled negative-resistance behavior and memory switching in bulk As-Te-Se glasses, J. Phys. D: Appl. Phys. 27 (1994) 2624-2627.	
	CM1	Chen, C.H.; Tai, K.L., Whisker growth induced by Ag photodoping in glassy GexSe <sub>1-x</sub> films, Appl. Phys. Lett. 37 (1980) 1075-1077.	
	CN1	Chen, G.; Cheng, J., Role of nitrogen in the crystallization of silicon nitride-doped chalcogenide glasses, J. Am. Ceram. Soc. 82 (1999) 2934-2936.	
	CO1	Chen, G.; Cheng, J.; Chen, W., Effect of Si <sub>3</sub> N <sub>4</sub> on chemical durability of chalcogenide glass, J. Non-Cryst. Solids 220 (1997) 249-253.	
	CP1	Cohen, M.H.; Neale, R.G.; Paskin, A., A model for an amorphous semiconductor memory device, J. Non-Cryst. Solids 8-10 (1972) 885-891.	
	CQ1	Croitoru, N.; Lazarescu, M.; Popescu, C.; Telnic, M.; and Vescan, L., Ohmic and non-ohmic conduction in some amorphous semiconductors, J. Non-Cryst. Solids 8-10 (1972) 781-786.	
	CR1	Dalven, R.; Gill, R., Electrical properties of beta-Ag <sub>2</sub> Te and beta-Ag <sub>2</sub> Se from 4.2 to 300K, J. Appl. Phys. 38 (1967) 753-756.	
	CS1	Davis, E.A., Semiconductors without form, Search 1 (1970) 152-155.	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	N/A		
		Filing Date	January 22, 2004		
		First Named Inventor	Kristy A. Campbell		
		Art Unit			
		Examiner Name			
Sheet	6	of	11	Attorney Docket Number	M4065.0988/P988-A

CT1	Dearnaley, G.; Stoneham, A.M.; Morgan, D.V., Electrical phenomena in amorphous oxide films, Rep. Prog. Phys. 33 (1970) 1129-1191.
CU1	Dejus, R.J.; Susman, S.; Volin, K.J.; Montague, D.G.; Price, D.L., Structure of Vitreous Ag-Ge-Se, J. Non-Cryst. Solids 143 (1992) 162-180.
CV1	den Boer, W., Threshold switching in hydrogenated amorphous silicon, Appl. Phys. Lett. 40 (1982) 812-813.
CW1	Drusedau, T.P.; Panckow, A.N.; Klabunde, F., The hydrogenated amorphous silicon/nanodisperse metal (SIMAL) system-Films of unique electronic properties, J. Non-Cryst. Solids 198-200 (1996) 829-832.
CX1	El Bouchairi, B.; Bernede, J.C.; Burgaud, P., Properties of Ag <sub>2</sub> -xSe <sub>1+x/n</sub> -Si diodes, Thin Solid Films 110 (1983) 107-113.
CY1	El Gharras, Z.; Bourahla, A.; Vautier, C., Role of photoinduced defects in amorphous Ge <sub>x</sub> Se <sub>1-x</sub> photoconductivity, J. Non-Cryst. Solids 155 (1993) 171-179.
CZ1	El Ghrandi, R.; Calas, J.; Galibert, G.; Averous, M., Silver photodissolution in amorphous chalcogenide thin films, Thin Solid Films 218 (1992) 259-273.
CA2	El Ghrandi, R.; Calas, J.; Galibert, G., Ag dissolution kinetics in amorphous GeSe <sub>5.5</sub> thin films from "in-situ" resistance measurements vs time, Phys. Stat. Sol. (a) 123 (1991) 451-460.
CB2	El-kady, Y.L., The threshold switching in semiconducting glass Ge <sub>21</sub> Se <sub>17</sub> Te <sub>62</sub> , Indian J. Phys. 70A (1996) 507-516.
CC2	Elliott, S.R., A unified mechanism for metal photodissolution in amorphous chalcogenide materials, J. Non-Cryst. Solids 130 (1991) 85-97.
CD2	Elliott, S.R., Photodissolution of metals in chalcogenide glasses: A unified mechanism, J. Non-Cryst. Solids 137-138 (1991) 1031-1034.
CE2	Elsamanoudy, M.M.; Hegab, N.A.; Fadel, M., Conduction mechanism in the pre-switching state of thin films containing Te As Ge Si, Vacuum 46 (1995) 701-707.
CF2	El-Zahed, H.; El-Korashy, A., Influence of composition on the electrical and optical properties of Ge <sub>20</sub> BixSe <sub>80-x</sub> films, Thin Solid Films 376 (2000) 236-240.
CG2	Fadel, M., Switching phenomenon in evaporated Se-Ge-As thin films of amorphous chalcogenide glass, Vacuum 44 (1993) 851-855.
CH2	Fadel, M.; El-Shair, H.T., Electrical, thermal and optical properties of Se <sub>75</sub> Ge <sub>7</sub> Sb <sub>18</sub> , Vacuum 43 (1992) 253-257.
CI2	Feng, X.; Bresser, W.J.; Boolchand, P., Direct evidence for stiffness threshold in Chalcogenide glasses, Phys. Rev. Lett. 78 (1997) 4422-4425.
CJ2	Feng, X.; Bresser, W.J.; Zhang, M.; Goodman, B.; Boolchand, P., Role of network connectivity on the elastic, plastic and thermal behavior of covalent glasses, J. Non-Cryst. Solids 222 (1997) 137-143.
CK2	Fischer-Colbrie, A.; Bienenstock, A.; Fuoss, P.H.; Marcus, M.A., Structure and bonding in photodiffused amorphous Ag-GeSe <sub>2</sub> thin films, Phys. Rev. B 38 (1988) 12388-12403.
CL2	Fleury, G.; Hamou, A.; Viger, C.; Vautier, C., Conductivity and crystallization of amorphous selenium, Phys. Stat. Sol. (a) 64 (1981) 311-316.
CM2	Fritzsche, H., Optical and electrical energy gaps in amorphous semiconductors, J. Non-Cryst. Solids 6 (1971) 49-71.
CN2	Fritzsche, H., Electronic phenomena in amorphous semiconductors, Annual Review of Materials Science 2 (1972) 697-744.
CO2	Gates, B.; Wu, Y.; Yin, Y.; Yang, P.; Xia, Y., Single-crystalline nanowires of Ag <sub>2</sub> Se can be synthesized by templating against nanowires of trigonal Se, J. Am. Chem. Soc. (2001) currently ASAP.
CP2	Gosain, D.P.; Nakamura, M.; Shimizu, T.; Suzuki, M.; Okano, S., Nonvolatile memory based on reversible phase transition phenomena in telluride glasses, Jap. J. Appl. Phys. 28 (1989) 1013-1018.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Compl t if Known</b>		
			Application Number	N/A	
			Filing Date	January 22, 2004	
			First Named Inventor	Kristy A. Campbell	
			Art Unit		
			Examiner Name		
Sheet	7	of	11	Attorney Docket Number	M4065.0988/P988-A

	CQ2	Guin, J.-P.; Rouxel, T.; Keryvin, V.; Sangleboeuf, J.-C.; Serre, I.; Lucas, J., Indentation creep of Ge-Se chalcogenide glasses below Tg: elastic recovery and non-Newtonian flow, J. Non-Cryst. Solids 298 (2002) 260-269.	
	CR2	Guin, J.-P.; Rouxel, T.; Sangleboeuf, J.-C.; Melscoet, I.; Lucas, J., Hardness, toughness, and scratchability of germanium-selenium chalcogenide glasses, J. Am. Ceram. Soc. 85 (2002) 1545-52.	
	CS2	Gupta, Y.P., On electrical switching and memory effects in amorphous chalcogenides, J. Non-Cryst. Sol. 3 (1970) 148-154.	
	CT2	Haberland, D.R.; Stiegler, H., New experiments on the charge-controlled switching effect in amorphous semiconductors, J. Non-Cryst. Solids 8-10 (1972) 408-414.	
	CU2	Haifz, M.M.; Ibrahim, M.M.; Dongol, M.; Hammad, F.H., Effect of composition on the structure and electrical properties of As-Se-Cu glasses, J. Apply. Phys. 54 (1983) 1950-1954.	
	CV2	Hajto, J.; Rose, M.J.; Osborne, I.S.; Snell, A.J.; Le Comber, P.G.; Owen, A.E., Quantization effects in metal/a-Si:H/metal devices, Int. J. Electronics 73 (1992) 911-913.	
	CW2	Hajto, J.; Hu, J.; Snell, A.J.; Turvey, K.; Rose, M., DC and AC measurements on metal/a-Si:H/metal room temperature quantised resistance devices, J. Non-Cryst. Solids 266-269 (2000) 1058-1061.	
	CX2	Hajto, J.; McAuley, B.; Snell, A.J.; Owen, A.E., Theory of room temperature quantized resistance effects in metal-a-Si:H-metal thin film structures, J. Non-Cryst. Solids 198-200 (1996) 825-828.	
	CY2	Hajto, J.; Owen, A.E.; Snell, A.J.; Le Comber, P.G.; Rose, M.J., Analogue memory and ballistic electron effects in metal-amorphous silicon structures, Phil. Mag. B 63 (1991) 349-369.	
	CZ2	Hayashi, T.; Ono, Y.; Fukaya, M.; Kan, H., Polarized memory switching in amorphous Se film, Japan. J. Appl. Phys. 13 (1974) 1163-1164.	
	CA3	Hegab, N.A.; Fadel, M.; Sedeek, K., Memory switching phenomena in thin films of chalcogenide semiconductors, Vacuum 45 (1994) 459-462.	
	CB3	Helbert et al., <i>Intralevel hybrid resist process with submicron capability</i> , SPIE Vol. 333 SUBMICRON LITHOGRAPHY, pp. 24-29 (1982).	
	CC3	Hilt, DISSERTATION: <i>Materials characterization of Silver Chalcogenide Programmable Metalization Cells</i> , Arizona State University, pp. Title page-114 (UMI Company, May 1999).	
	CD3	Hirose et al., <i>High Speed Memory Behavior and Reliability of an Amorphous As<sub>2</sub>S<sub>3</sub> Film Doped Ag</i> , PHYS. STAT. SOL. (a) 61, pp. 87-90 (1980).	
	CE3	Hirose, Y.; Hirose, H., Polarity-dependent memory switching and behavior of Ag dendrite in Ag-photodoped amorphous As <sub>2</sub> S <sub>3</sub> films, J. Appl. Phys. 47 (1976) 2767-2772.	
	CF3	Holmquist et al., <i>Reaction and Diffusion in Silver-Arsenic Chalcogenide Glass Systems</i> , 62 J. AMER. CERAM. SOC., No. 3-4, pp. 183-188 (March-April 1979).	
	CG3	Hong, K.S.; Speyer, R.F., Switching behavior in II-IV-V <sub>2</sub> amorphous semiconductor systems, J. Non-Cryst. Solids 116 (1990) 191-200.	
	CH3	Hosokawa, S., Atomic and electronic structures of glassy GexSe1-x around the stiffness threshold composition, J. Optoelectronics and Advanced Materials 3 (2001) 199-214.	
	CI3	Hu, J.; Snell, A.J.; Hajto, J.; Owen, A.E., Constant current forming in Cr/p+a-/Si:H/V thin film devices, J. Non-Cryst. Solids 227-230 (1998) 1187-1191.	
	CJ3	Hu, J.; Hajto, J.; Snell, A.J.; Owen, A.E.; Rose, M.J., Capacitance anomaly near the metal-non-metal transition in Cr-hydrogenated amorphous Si-V thin-film devices, Phil. Mag. B. 74 (1996) 37-50.	
	CK3	Hu, J.; Snell, A.J.; Hajto, J.; Owen, A.E., Current-induced instability in Cr-p+a-Si:H-V thin film devices, Phil. Mag. B 80 (2000) 29-43.	
	CL3	Huggett et al., Development of silver sensitized germanium selenide photoresist by reactive	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	N/A	
			Filing Date	January 22, 2004	
			First Named Inventor	Kristy A. Campbell	
			Art Unit		
			Examiner Name		
Sheet	8	of	11	Attorney Docket Number	M4065.0988/P988-A

		sputter etching in SF <sub>6</sub> , 42 Appl. Phys. Lett., No. 7, pp. 592-594 (April 1983).	
CM3		Iizima, S.; Sugi, M.; Kikuchi, M.; Tanaka, K., Electrical and thermal properties of semiconducting glasses As-Te-Ge, Solid State Comm. 8 (1970) 153-155.	
CN3		Ishikawa, R.; Kikuchi, M., Photovoltaic study on the photo-enhanced diffusion of Ag in amorphous films of Ge <sub>2</sub> S <sub>3</sub> , J. Non-Cryst. Solids 35 & 36 (1980) 1061-1066.	
CO3		Iyetomi, H.; Vashishta, P.; Kalia, R.K., Incipient phase separation in Ag/Ge/Se glasses: clustering of Ag atoms, J. Non-Cryst. Solids 262 (2000) 135-142.	
CP3		Jones, G.; Collins, R.A., Switching properties of thin selenium films under pulsed bias, Thin Solid Films 40 (1977) L15-L18.	
CQ3		Joullie, A.M.; Marucchi, J., On the DC electrical conduction of amorphous As <sub>2</sub> Se <sub>7</sub> before switching, Phys. Stat. Sol. (a) 13 (1972) K105-K109.	
CR3		Joullie, A.M.; Marucchi, J., Electrical properties of the amorphous alloy As <sub>2</sub> Se <sub>5</sub> , Mat. Res. Bull. 8 (1973) 433-442.	
CS3		Kaplan, T.; Adler, D., Electrothermal switching in amorphous semiconductors, J. Non-Cryst. Solids 8-10 (1972) 538-543.	
CT3		Kawaguchi et al., Mechanism of photosurface deposition, 164-166 J. NON-CRYST. SOLIDS, pp. 1231-1234 (1993).	
CU3		Kawaguchi, T.; Maruno, S.; Elliott, S.R., Optical, electrical, and structural properties of amorphous Ag-Ge-S and Ag-Ge-Se films and comparison of photoinduced and thermally induced phenomena of both systems, J. Appl. Phys. 79 (1996) 9096-9104.	
CV3		Kawaguchi, T.; Masui, K., Analysis of change in optical transmission spectra resulting from Ag photodoping in chalcogenide film, Jpn. J. Appl. Phys. 26 (1987) 15-21.	
CW3		Kawasaki, M.; Kawamura, J.; Nakamura, Y.; Aniya, M., Ionic conductivity of Ag <sub>x</sub> (GeSe <sub>3</sub> ) <sub>1-x</sub> (0<=x<=0.571) glasses, Solid state Ionics 123 (1999) 259-269.	
CX3		Kluge, G.; Thomas, A.; Klabes, R.; Grotzschel, R., Silver photodiffusion in amorphous Ge <sub>x</sub> Se <sub>100-x</sub> , J. Non-Cryst. Solids 124 (1990) 186-193.	
CY3		Kolobov, A.V., On the origin of p-type conductivity in amorphous chalcogenides, J. Non-Cryst. Solids 198-200 (1996) 728-731.	
CZ3		Kolobov, A.V., Lateral diffusion of silver in vitreous chalcogenide films, J. Non-Cryst. Solids 137-138 (1991) 1027-1030.	
CA4		Kolobov et al., Photodoping of amorphous chalcogenides by metals, Advances in Physics, 1991, Vol. 40, No. 5, pgs. 625-684.	
CB4		Korkinova, Ts.N.; Andreichin, R.E., Chalcogenide glass polarization and the type of contacts, J. Non-Cryst. Solids 194 (1996) 256-259.	
CC4		Kotkata, M.F.; Afif, M.A.; Labib, H.H.; Hegab, N.A.; Abdel-Aziz, M.M., Memory switching in amorphous GeSeTe chalcogenide semiconductor films, Thin Solid Films 240 (1994) 143-146.	
CD4		Kozicki et al., Silver incorporation in thin films of selenium rich Ge-Se glasses, International Congress on Glass, Volume 2, Extended Abstracts, July 2001, pgs. 8-9.	
CE4		Michael N. Kozicki, 1. Programmable Metallization Cell Technology Description, February 18, 2000	
CF4		Michael N. Kozicki, Axon Technologies Corp. and Arizona State University, Presentation to Micron Technology, Inc., April 6, 2000	
CG4		Kozicki et al., Applications of Programmable Resistance Changes In Metal-Doped Chalcogenides, Electrochemical Society Proceedings, Volume 99-13, 1999, pgs. 298-309.	
CH4		Kozicki et al., Nanoscale effects in devices based on chalcogenide solid solutions, Superlattices and Microstructures, Vol. 27, No. 516, 2000, pgs. 485-488.	
CI4		Kozicki et al., Nanoscale phase separation in Ag-Ge-Se glasses, Microelectronic Engineering 63 (2002) pgs 155-159.	
CJ4		Lakshminarayan, K.N.; Srivastava, K.K.; Panwar, O.S.; Dumar, A., Amorphous semiconductor devices: memory and switching mechanism, J. Instn Electronics & Telecom. Engrs 27 (1981)	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	N/A
				Filing Date	January 22, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	
				Examiner Name	
Sheet	9	of	11	Attorney Docket Number	M4065.0988/P988-A

		16-19.	
CK4	Lal, M.; Goyal, N., Chemical bond approach to study the memory and threshold switching chalcogenide glasses, Indian Journal of pure & appl. phys. 29 (1991) 303-304.		
CL4	Leimer, F.; Stotzel, H.; Kottwitz, A., Isothermal electrical polarisation of amorphous GeSe films with blocking Al contacts influenced by Poole-Frenkel conduction, Phys. Stat. Sol. (a) 29 (1975) K129-K132.		
CM4	Leung, W.; Cheung, N.; Neureuther, A.R., Photoinduced diffusion of Ag in GexSe1-x glass, Appl. Phys. Lett. 46 (1985) 543-545.		
CN4	Matsushita, T.; Yamagami, T.; Okuda, M., Polarized memory effect observed on Se-SnO2 system, Jap. J. Appl. Phys. 11 (1972) 1657-1662.		
CO4	Matsushita, T.; Yamagami, T.; Okuda, M., Polarized memory effect observed on amorphous selenium thin films, Jpn. J. Appl. Phys. 11 (1972) 606.		
CP4	Mazurier, F.; Levy, M.; Souquet, J.L, Reversible and irreversible electrical switching in TeO2-V2O5 based glasses, Journal de Physique IV 2 (1992) C2-185 - C2-188.		
CQ4	McHardy et al., The dissolution of metals in amorphous chalcogenides and the effects of electron and ultraviolet radiation, 20 J. Phys. C.: Solid State Phys., pp. 4055-4075 (1987)f		
CR4	Messoussi, R.; Bernede, J.C.; Benhida, S.; Abachi, T.; Latef, A., Electrical characterization of M/Se structures (M=Ni,Bi), Mat. Chem. And Phys. 28 (1991) 253-258.		
CS4	Mitkova, M.; Boolchand, P., Microscopic origin of the glass forming tendency in chalcogenides and constraint theory, J. Non-Cryst. Solids 240 (1998) 1-21.		
CT4	Mitkova, M.; Kozicki, M.N., Silver incorporation in Ge-Se glasses used in programmable metallization cell devices, J. Non-Cryst. Solids 299-302 (2002) 1023-1027.		
CU4	Mitkova, M.; Wang, Y.; Boolchand, P., Dual chemical role of Ag as an additive in chalcogenide glasses, Phys. Rev. Lett. 83 (1999) 3848-3851.		
CV4	Miyatani, S.-y., Electronic and ionic conduction in (AgxCu1-x)2Se, J. Phys. Soc. Japan 34 (1973) 423-432.		
CW4	Miyatani, S.-y., Electrical properties of Ag2Se, J. Phys. Soc. Japan 13 (1958) 317.		
CX4	Miyatani, S.-y., Ionic conduction in beta-Ag2Te and beta-Ag2Se, Journal Phys. Soc. Japan 14 (1959) 996-1002.		
CY4	Mott, N.F., Conduction in glasses containing transition metal ions, J. Non-Cryst. Solids 1 (1968) 1-17.		
CZ4	Nakayama, K.; Kitagawa, T.; Ohmura, M.; Suzuki, M., Nonvolatile memory based on phase transitions in chalcogenide thin films, Jpn. J. Appl. Phys. 32 (1993) 564-569.		
CA5	Nakayama, K.; Kojima, K.; Hayakawa, F.; Imai, Y.; Kitagawa, A.; Suzuki, M., Submicron nonvolatile memory cell based on reversible phase transition in chalcogenide glasses, Jpn. J. Appl. Phys. 39 (2000) 6157-6161.		
CB5	Nang, T.T.; Okuda, M.; Matsushita, T.; Yokota, S.; Suzuki, A., Electrical and optical parameters of GexSe1-x amorphous thin films, Jap. J. App. Phys. 15 (1976) 849-853.		
CC5	Narayanan, R.A.; Asokan, S.; Kumar, A., Evidence concerning the effect of topology on electrical switching in chalcogenide network glasses, Phys. Rev. B 54 (1996) 4413-4415.		
CD5	Neale, R.G.; Aseltine, J.A., The application of amorphous materials to computer memories, IEEE transactions on electron dev. Ed-20 (1973) 195-209.		
CE5	Ovshinsky S.R.; Fritzsche, H., Reversible structural transformations in amorphous semiconductors for memory and logic, Metallurgical transactions 2 (1971) 641-645.		
CF5	Ovshinsky, S.R., Reversible electrical switching phenomena in disordered structures, Phys. Rev. Lett. 21 (1968) 1450-1453.		
CG5	Owen, A.E.; LeComber, P.G.; Sarraayrouse, G.; Spear, W.E., New amorphous-silicon electrically programmable nonvolatile switching device, IEE Proc. 129 (1982) 51-54		
CH5	Owen, A.E.; Firth, A.P.; Ewen, P.J.S., Photo-induced structural and physico-chemical changes in amorphous chalcogenide semiconductors, Phil. Mag. B 52 (1985) 347-362.		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	N/A
				Filing Date	January 22, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	
				Examiner Name	
Sheet	10	of	11	Attorney Docket Number	M4065.0988/P988-A

	CI5	Owen, A.E.; Le Comber, P.G.; Hajto, J.; Rose, M.J.; Snell, A.J., Switching in amorphous devices, <i>Int. J. Electronics</i> 73 (1992) 897-906.	
	CJ5	Owen et al., Metal-Chalcogenide Photoresists for High Resolution Lithography and Sub-Micron Structures, <i>Nanostructure Physics and Fabrication</i> , pp. 447-451 (M. Reed ed. 1989).	
	CK5	Pearson, A.D.; Miller, C.E., Filamentary conduction in semiconducting glass diodes, <i>App. Phys. Lett.</i> 14 (1969) 280-282.	
	CL5	Pinto, R.; Ramanathan, K.V., Electric field induced memory switching in thin films of the chalcogenide system Ge-As-Se, <i>Appl. Phys. Lett.</i> 19 (1971) 221-223.	
	CM5	Popescu, C., The effect of local non-uniformities on thermal switching and high field behavior of structures with chalcogenide glasses, <i>Solid-state electronics</i> 18 (1975) 671-681.	
	CN5	Popescu, C.; Croitoru, N., The contribution of the lateral thermal instability to the switching phenomenon, <i>J. Non-Cryst. Solids</i> 8-10 (1972) 531-537.	
	CO5	Popov, A.I.; Geller, I.KH.; Shemetova, V.K., Memory and threshold switching effects in amorphous selenium, <i>Phys. Stat. Sol. (a)</i> 44 (1977) K71-K73.	
	CP5	Prakash, S.; Asokan, S.; Ghare, D.B., Easily reversible memory switching in Ge-As-Te glasses, <i>J. Phys. D: Appl. Phys.</i> 29 (1996) 2004-2008.	
	CQ5	Rahman, S.; Sivarama Sastry, G., Electronic switching in Ge-Bi-Se-Te glasses, <i>Mat. Sci. and Eng. B12</i> (1992) 219-222.	
	CR5	Ramesh, K.; Asokan, S.; Sangunni, K.S.; Gopal, E.S.R., Electrical Switching in germanium telluride glasses doped with Cu and Ag, <i>Appl. Phys. A</i> 69 (1999) 421-425.	
	CS5	Rose, M.J.; Hajto, J.; Lecomber, P.G.; Gage, S.M.; Choi, W.K.; Snell, A.J.; Owen, A.E., Amorphous silicon analogue memory devices, <i>J. Non-Cryst. Solids</i> 115 (1989) 168-170.	
	CT5	Rose, M.J.; Snell, A.J.; Lecomber, P.G.; Hajto, J.; Fitzgerald, A.G.; Owen, A.E., Aspects of non-volatility in a -Si:H memory devices, <i>Mat. Res. Soc. Symp. Proc. V</i> 258, 1992, 1075-1080.	
	CU5	Schuoeker, D.; Rieder, G., On the reliability of amorphous chalcogenide switching devices, <i>J. Non-Cryst. Solids</i> 29 (1978) 397-407.	
	CV5	Sharma, A.K.; Singh, B., Electrical conductivity measurements of evaporated selenium films in vacuum, <i>Proc. Indian Natn. Sci. Acad.</i> 46, A, (1980) 362-368.	
	CW5	Sharma, P., Structural, electrical and optical properties of silver selenide films, <i>Ind. J. Of pure and applied phys.</i> 35 (1997) 424-427.	
	CX5	Shimizu et al., <i>The Photo-Erasable Memory Switching Effect of Ag Photo-Doped Chalcogenide Glasses</i> , 46 B. CHEM SOC. JAPAN, No. 12, pp. 3662-3365 (1973).	
	CY5	Snell, A.J.; Lecomber, P.G.; Hajto, J.; Rose, M.J.; Owen, A.E.; Osborne, I.L., Analogue memory effects in metal/a-Si:H/metal memory devices, <i>J. Non-Cryst. Solids</i> 137-138 (1991) 1257-1262.	
	CZ5	Snell, A.J.; Hajto, J.; Rose, M.J.; Osborne, L.S.; Holmes, A.; Owen, A.E.; Gibson, R.A.G., Analogue memory effects in metal/a-Si:H/metal thin film structures, <i>Mat. Res. Soc. Symp. Proc. V</i> 297, 1993, 1017-1021.	
	CA6	Steventon, A.G., Microfilaments in amorphous chalcogenide memory devices, <i>J. Phys. D: Appl. Phys.</i> 8 (1975) L120-L122.	
	CB6	Steventon, A.G., The switching mechanisms in amorphous chalcogenide memory devices, <i>J. Non-Cryst. Solids</i> 21 (1976) 319-329.	
	CC6	Stocker, H.J., Bulk and thin film switching and memory effects in semiconducting chalcogenide glasses, <i>App. Phys. Lett.</i> 15 (1969) 55-57.	
	CD6	Tanaka, K., Ionic and mixed conductions in Ag photodoping process, <i>Mod. Phys. Lett B</i> 4 (1990) 1373-1377.	
	CE6	Tanaka, K.; Iizima, S.; Sugi, M.; Okada, Y.; Kikuchi, M., Thermal effects on switching phenomenon in chalcogenide amorphous semiconductors, <i>Solid State Comm.</i> 8 (1970) 387-389.	
	CF6	Thornburg, D.D., Memory switching in a Type I amorphous chalcogenide, <i>J. Elect. Mat.</i> 2	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	N/A		
		Filing Date	January 22, 2004		
		First Named Inventor	Kristy A. Campbell		
		Art Unit			
		Examiner Name			
Sheet	11	of	11	Attorney Docket Number	M4065.0988/P988-A

		(1973) 3-15.	
CG6	Thornburg, D.D., Memory switching in amorphous arsenic triselenide, J. Non-Cryst. Solids 11 (1972) 113-120.		
CH6	Thornburg, D.D.; White, R.M., Electric field enhanced phase separation and memory switching in amorphous arsenic triselenide, Journal(?) (1972) 4609-4612.		
CI6	Tichy, L.; Ticha, H., Remark on the glass-forming ability in GexSe1-x and AsxSe1-x systems, J. Non-Cryst. Solids 261 (2000) 277-281.		
CJ6	Titus, S.S.K.; Chatterjee, R.; Asokan, S., Electrical switching and short-range order in As-Te glasses, Phys. Rev. B 48 (1993) 14650-14652.		
CK6	Tranchant, S.; Peytavin, S.; Ribes, M.; Flank, A.M.; Dexpert, H.; Lagarde, J.P., Silver chalcogenide glasses Ag-Ge-Se: Ionic conduction and exafs structural investigation, Transport-structure relations in fast ion and mixed conductors Proceedings of the 6th Riso International symposium. 9-13 September 1985.		
CL6	Tregouet, Y.; Bernede, J.C., Silver movements in Ag2Te thin films: switching and memory effects, Thin Solid Films 57 (1979) 49-54.		
CM6	Uemura, O.; Kameda, Y.; Kokai, S.; Satow, T., Thermally induced crystallization of amorphous Ge0.4Se0.6, J. Non-Cryst. Solids 117-118 (1990) 219-221.		
CN6	Uttecht, R.; Stevenson, H.; Sie, C.H.; Griener, J.D.; Raghavan, K.S., Electric field induced filament formation in As-Te-Ge glass, J. Non-Cryst. Solids 2 (1970) 358-370.		
CO6	Viger, C.; Lefrancois, G.; Fleury, G., Anomalous behaviour of amorphous selenium films, J. Non-Cryst. Solids 33 (1976) 267-272.		
CP6	Vodenicharov, C.; Parvanov, S.; Petkov, P., Electrode-limited currents in the thin-film M-GeSe-M system, Mat. Chem. And Phys. 21 (1989) 447-454.		
CQ6	Wang, S.-J.; Misium, G.R.; Camp, J.C.; Chen, K.-L.; Tigelaar, H.L., High-performance Metal/silicide antifuse, IEEE electron dev. Lett. 13 (1992) 471-472.		
CR6	Weirauch, D.F., Threshold switching and thermal filaments in amorphous semiconductors, App. Phys. Lett. 16 (1970) 72-73.		
CS6	West, W.C.; Sieradzki, K.; Kardynal, B.; Kozicki, M.N., Equivalent circuit modeling of the Ag[As0.24S0.36Ag0.40]Ag System prepared by photodissolution of Ag, J. Electrochem. Soc. 145 (1998) 2971-2974		
CT6	West, W.C., Electrically erasable non-volatile memory via electrochemical deposition of multifractal aggregates, Ph.D. Dissertation, ASU 1998		
CU6	Zhang, M.; Mancini, S.; Bresser, W.; Boolchand, P., Variation of glass transition temperature, Tg, with average coordination number, <m>, in network glasses: evidence of a threshold behavior in the slope  dTg/d<m>  at the rigidity percolation threshold (<m>=2.4), J. Non-Cryst. Solids 151 (1992) 149-154.		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.